

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An information processing system including:
a first information processing apparatus having a first communication port for transmitting and receiving data;
a second information processing apparatus having a second communication port for transmitting and receiving data; and
a communicating portion for executing bi-directional communication between the first communication port and the second communication port, the information processing system comprising:
a utilizing portion for utilizing the communicating portion, for communication in a direction for which a first application program run on the first information processing apparatus sets the first communication port and the second communication port respectively as the sender and the destination of data; [[and]]
another utilizing portion for utilizing the communicating portion, for communication in a direction for which a second application program run on the second information processing apparatus sets the second communication port and the first communication port respectively as the sender and the destination of data; and [[.]]
a path unit management table, each of the first and second application programs being operable to form and re-form a path for communication between the first and second information processing apparatus, thereby controlling a direction of communications in the path, by setting path information in the path unit management table.

2. (Currently Amended) A storage system including:
a first storage device controller connected to a first storage device;

a second storage device controller connected to a second storage device;
a first communication port that the first storage device controller has for transmission and reception of data;
a second communication port that the second storage device controller has for transmission and reception of data;
a communicating portion for carrying out bi-directional communication between the first communication port and the second communication port, and being configured to write the data to be written to the first storage device also to the second storage device;
a utilizing portion for utilizing the communicating portion, for communication in a direction for which a first application program run on the first information processing apparatus sets the first communication port and the second communication port respectively as the sender and the destination of data; [[and]]
another utilizing portion for utilizing the communicating portion, for communication in a direction for which a second application program run on the second information processing apparatus sets the second communication port and the first communication port respectively as the sender and the destination of data; and [[.]]
a path unit management table, each of the first and second application programs being operable to form and re-form a path for communication between the first and second communication ports, thereby controlling a direction of communications in the path, by setting path information in the path unit management table.

3. (Previously Presented) A storage system according to claim 2,
wherein the utilizing portion for utilizing the communicating portion, for communication in a direction for which a first application program run on the first storage device controller sets the first communication port and the second communication port respectively as the sender and the destination of data includes a storing portion for storing in the first storage device controller communication direction defining information in which the first application program run on the first storage device controller sets the first communication port and the second communication port respectively as the sender and the destination of data, and for

utilizing the communicating portion for communication in the direction defined in the information; and

wherein the utilizing portion for utilizing the communicating portion, for communication in a direction for which a second application program run on the second storage device controller sets the second communication port and the first communication port respectively as the sender and the destination of data includes a utilizing portion for utilizing the communicating portion for communication in a direction for which the second application program run the second storage device controller exchanges the communication ports allocated respectively as the sender and the destination of the communication direction defining information.

4. (Original) A storage system according to claim 2 further comprising:

a relating portion for relating a first storage area set logically in a storage area provided by the first storage device and a second storage area set logically in a storage area provided by the second storage device respectively to the duplication source and the duplication destination of data, and for writing the data to be written to the first storage area, also to the second storage area; and

a relating portion for relating the second storage area and the first storage area respectively to the duplication source and the duplication destination, and for writing the data to be written to the second storage area, also to the first storage area.

5. (Currently Amended) A first information processing apparatus in an information processing system including:

the first information processing apparatus having a first communication port for transmitting and receiving data;

second communication port for transmitting and receiving data; [[and]]

a communicating portion for executing bi-directional communication between the first communication port and the second communication port, the first information processing apparatus comprising a utilizing portion for utilizing the communicating portion, for

communication in a direction for which an application program run on the first information processing apparatus sets the first communication port and the second communication port respectively as the sender and the destination of data; and

a path unit management table allowing the application program to form and re-form a path for communication between the first and second information processing apparatus, thereby controlling a direction of communications in the path, by setting path information in the path unit management table.

6. (Currently Amended) A second information processing apparatus in an information processing system including:

a first information processing apparatus having a first communication port for transmitting and receiving data;

the second information processing apparatus having a second communication port for transmitting and receiving data; [[and]]

a communicating portion for executing bi-directional communication between the first communication port and the second communication port, the second information processing apparatus comprising a utilizing portion for utilizing the communicating portion, for communication in a direction for which an application program run on the second information processing apparatus sets the second communication port and the first communication port respectively as the sender and the destination of data; and

a path unit management table allowing the application program to form and re-form a path for communication between the first and second information processing apparatus, thereby controlling a direction of communications in the path, by setting path information in the path unit management table.

7. (Currently Amended) A first storage device controller in a storage system including:

the first storage device controller connected to a first storage device;

a second storage device controller connected to a second storage device;

a first communication port that the first storage device controller has for transmission and reception of data;

a second communication port that the second storage device controller has for transmission and reception of data; [[and]]

a communicating portion for carrying out bi-directional communication between the first communication port and the second communication port, and being configured to write the data to be written to the first storage device also to the second storage device, the first storage device controller comprising a utilizing portion for utilizing the communicating portion, for communication in a direction for which an application program run on the first storage device controller sets the first communication port and the second communication port respectively as the sender and the destination of data; and

a path unit management table allowing the application program to form and re-form a path for communication between the first and second communication ports, thereby controlling a direction of communications in the path, by setting path information in the path unit management table.

8. (Original) A storage device controller according to claim 7, wherein the utilizing portion for utilizing the communicating portion, for communication in a direction for which an application program run on the first storage device controller sets the first communication port and the second communication port respectively as the sender and the destination of data includes:

a storing portion for storing in the first storage device controller communication direction defining information in which the application program run on the first storage device controller relates the first communication port and the second communication port respectively to the sender and the destination of data, and for utilizing the communicating portion for communication in the direction defined in the information.

9. (Original) A storage device controller according to claim 7 further comprising:

a relating portion for relating a first storage area set logically in a storage area provided by the first storage device and a second storage area set logically in a storage area provided by the second storage device respectively to the duplication source and the duplication destination of data, and for writing the data to be written to the first storage area also to second storage area.

10. (Currently Amended) A second storage device controller in a storage system including:

- a first storage device controller connected to a first storage device;
- the second storage device controller connected to a second storage device;
- a first communication port that the first storage device controller has for transmission and reception of data;

- a second communication port that the second storage device controller has for transmission and reception of data; [[and]]

- a communicating portion for carrying out bi-directional communication between the first communication port and the second communication port, and being configured to write the data to be written to the first storage device also to the second storage device, the second storage device controller comprising a utilizing portion for utilizing the communicating portion, for communication in a direction for which an application program run on the second storage device controller sets the first communication port and the second communication port respectively as the sender and the destination of data; and

- a path unit management table allowing the application program to form and re-form a path for communication between the first and second communication ports, thereby controlling a direction of communications in the path, by setting path information in the path unit management table.

11. (Original) A storage device controller according to claim 10, wherein the utilizing portion for utilizing the communicating portion, for communication in a direction for which an application program run on the second storage device controller sets the second

communication port and the first communication port respectively as the sender and the destination of data includes:

a storing portion for storing in the second storage device controller communication direction defining information in which the application program run on the second storage device controller relates the second communication port and the first communication port respectively to the sender and the destination of data, and for utilizing the communicating portion, for communication in the direction defined in the information.

12. (Original) A storage device controller according to claim 10 further comprising:

a relating portion for relating a first storage area set logically in a storage area provided by the first storage device and a second storage area set logically in a storage area provided by the second storage device respectively to the duplication source and the duplication destination of data, and for writing the data to be written to the second storage area also to the first storage area.

13. (Currently Amended) A computer-readable medium containing a computer program software for causing an information processing system including:

a first information processing apparatus having a first communication port for transmitting and receiving data;

a second information processing apparatus having a second communication port for transmitting and receiving data; [[and]]

a path unit management table allowing an application program to form and re-form a path for communication between the first and second information processing apparatus, thereby controlling a direction of communications in the path, by setting path information in the path unit management table; and

a communicating portion for executing bi-directional communication between the first communication port and the second communication port, to execute the steps of:

utilizing the communicating portion, for communication in a direction for which the first communication port and the second communication port are respectively set as the sender and the destination of data; and

utilizing the communicating portion, for communication in a direction for which the second communication port and the first communication port are respectively set as the sender and the destination of data.

14. (Currently Amended) A computer-readable medium containing a computer program software for causing a storage system including:

a first storage device controller connected to a first storage device;

a second storage device controller connected to a second storage device;

a first communication port that the first storage device controller has for transmission and reception of data;

a second communication port that the second storage device controller has for transmission and reception of data; [[and]]

a path unit management table allowing an application program to form and reform a path for communication between the first and second communication ports, thereby controlling a direction of communications in the path, by setting path information in the path unit management table; and

a communicating portion for carrying out bi-directional communication between the first communication port and the second communication port, and having:

a function for writing the data to be written to the first storage device also to the second storage device, to execute the steps of:

utilizing the communicating portion, for communication in a direction for which the first communication port and the second communication port are respectively set as the sender and the destination of data; and

utilizing the communicating portion, for communication in a direction for which the second communication port and the first communication port are respectively set as the sender and the destination of data.

15. (Original) A computer-readable medium containing the computer program software according to claim 14, wherein the step of utilizing the communicating portion, for communication in a direction for which the first communication port and the second communication port are respectively set as the sender and the destination of data includes a step of storing in the first storage device controller communication direction defining information in which the first communication port and the second communication port are respectively related to the sender and the destination of data, and utilizing the communicating portion for communication in the direction defined in the information and wherein

the step of utilizing the communicating portions, for communication in a direction for which the second communication port and the first communication port are respectively set as the sender and the destination of data includes a step of utilizing the communicating portion, for communication in a direction for which the communication ports allocated respectively as the sender and the destination of the communication direction defining information are exchanged with each other.

16. (Original) A computer-readable medium containing a computer program software according to claim 14 comprising the steps of:

utilizing the communicating portion, for communication in a direction for which the first communication port and the second communication port are respectively set as the sender and the destination of data;

relating a first storage area set logically in a storage area provided by the first storage device and a second storage area set logically in a storage area provided by the second storage device respectively to the duplication source and the duplication destination of data, and writing the data to be written to the first storage area, also to the second storage area;

utilizing the communicating portion, for communication in a direction for which the second communication port and the first communication port are respectively set as the sender and the destination of data; and

relating the second storage area and the first storage area respectively to the duplication source and the duplication destination of data, and writing the data to be written to the second storage area, also to the first storage area.